

Title (en)
APPARATUS AND METHOD FOR AIRBAG INFLATION GAS DISTRIBUTION

Title (de)
VORRICHTUNG UND VERFAHREN ZUR AIRBAGAUFLASGASVERTEILUNG

Title (fr)
APPAREIL ET PROCEDE DE DISTRIBUTION DE GAZ DE GONFLAGE DE COUSSIN DE SECURITE

Publication
EP 1412233 A4 20041110 (EN)

Application
EP 02737590 A 20020625

Priority
• US 0220202 W 20020625
• US 89238801 A 20010626

Abstract (en)
[origin: US2002195804A1] ABSTRACT OF THE INVENTION The present invention provides a system and method for distributing inflation gases within an airbag cushion. Such a cushion may have one or more protection zones configured to inflate to protect vehicle occupants. An inflation channel maybe enclosed by one or more of the protection zones, and may be attached to a mounting surface within a protection zone. The inflation channel may be connected to an inflator, and may have a plurality of holes along its length, sized or spaced apart in a manner selected to provide a comparatively even flow rate of inflation gas to all parts of the cushion during inflation. Additionally, the inflation channel may have a gas outlet extension along which the holes are disposed; the gas outlet extension may have a tapered shape configured to collapse under external pressure to prevent backflow of inflation gases into the inflation channel. The inflation channel may be easily manufactured in a number of ways, including extrusion of a polymeric workpiece with a slit along its length. The slit may be intermittently closed to form the gas outlet extension with the holes, without the need for punching or drilling.

IPC 1-7
B60R 21/16

IPC 8 full level
B60R 21/16 (2006.01); **B60R 21/232** (2011.01); **B60R 21/2346** (2011.01); **B60R 21/233** (2006.01); **B60R 21/235** (2006.01)

CPC (source: EP US)
B60R 21/232 (2013.01 - EP US); **B60R 21/2346** (2013.01 - EP US); **B60R 2021/23316** (2013.01 - EP US); **B60R 2021/23514** (2013.01 - EP US); **B60R 2021/23519** (2013.01 - EP US); **B60R 2021/2359** (2013.01 - EP US)

Citation (search report)
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• See references of WO 03002488A2

Designated contracting state (EPC)
AT BE CH CY DE FR GB IT LI

DOCDB simple family (publication)
US 2002195804 A1 20021226; **US 6755436 B2 20040629**; CN 1284692 C 20061115; CN 1535223 A 20041006; DE 60224597 D1 20080221; DE 60224597 T2 20090122; EP 1412233 A2 20040428; EP 1412233 A4 20041110; EP 1645477 A2 20060412; EP 1645477 A3 20060628; EP 1645477 B1 20080109; JP 2004531427 A 20041014; JP 4050696 B2 20080220; WO 03002488 A2 20030109; WO 03002488 A3 20031120

DOCDB simple family (application)
US 89238801 A 20010626; CN 02812640 A 20020625; DE 60224597 T 20020625; EP 02737590 A 20020625; EP 05111590 A 20020625; JP 2003508674 A 20020625; US 0220202 W 20020625